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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,941

01/30/2006

John Window

SERJ 70820

1394

29694

7590

10/08/2008

PIETRAGALLO GORDON ALFANO BOSICK & RASPANTI LLP
ONE OXFORD CENTRE, 38TH FLOOR
301 GRANT STREET
PITTSBURGH, PA 15219-6404

EXAMINER

HOLLOWAY, JASON R

ART UNIT

PAPER NUMBER

4165

MAIL DATE

DELIVERY MODE

10/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,941	Applicant(s) WINDOW, JOHN	
	Examiner JASON HOLLOWAY	Art Unit 4165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10 November 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is a first Office Action Non-Final rejection on the merits. Claims 1-7 and 9 are currently pending and have been considered below. It is noted that claim 8 has been cancelled in a preliminary amendment to the claims filed 10 November 2005.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "gutter" as claimed in claim 9 and described in specification pages 7 and 8 must be shown or the feature canceled from the claim. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

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pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because the “link means” (item 12) is described in the specification as being shown in figure 2, however this item is not described in figure 2. Further, Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because on page 7, the reference character “28” has been used to designate

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both a “circular aperture” and a “pin”. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:

On page 6 line 26, the phrase “the are hoisted” should be changed to -- they are hoisted--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by DiMartino (5,454,673).

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Regarding claim 1, DiMartino teaches a mutually aligned channel means (orifice 28 of figure 1) on the facing outside walls (as illustrated in figure 1) of each pair of adjacent modular building units (shipping containers 31), link means (connector 10) to be lowered between two adjacent but mutually spaced modular building units (31) in the final building and passing vertically into the mutually aligned channel means (as illustrated in figure 4, arms (12) of connector (10) pass vertically into channels (orifice 28)) for engaging with the mutually aligned channel means to lock them together, and resiliently biased latching means (via pushrod 152 and pivoting members 13, 14) permitting the link means (arms 12) to pass vertically into the aligned channel means (28) to engage the channel means but preventing movement in the return direction (frictional engagement of arm ends, items 32-34 is illustrated in figure 4 prevents movement; column 3 line 67 to column 4 line 3).

Regarding claim 2, DiMartino teaches the resiliently biased latching means (via pushrod 152 and pivoting members 13, 14) comprises spring supports (by definition, pushrod 152 acts as a spring) for the link means (connector 10) permitting the link means to deflect (arms 12 are rotated) and pass vertically into the channel means (28) (as illustrated in figure 4) as the link means (10) is lowered, and to spring back beneath a shoulder (shoulder is the inside edge of orifice 28) of the channel means (28) to prevent return movement (the interlocking action of 32-34 within the channel as illustrated in figure 4 prevent return movement) (see column 3 lines 37-66 for a detailed description of the locking means).

Regarding claim 3, DiMartino teaches the link means (connector 10) comprise a pair of out-turned flanges (arms 12) on the bottom edges of the spring supports (152) (depending on the orientation of the blocks, the engagement between pushrod 152 and arms 12 could be considered at the bottom of the pushrod), and the channel means (via orifice 28) comprises a pair of channel members (one on each side) secured to the outside of the modules (31) so that the flanges engage beneath shoulders (shoulder is the inside edge of orifice 28) of the channel members (28) when the link means (connector 10) is lowered into the space between adjacent building modules (31) (as illustrated in figure 4).

Regarding claim 4, DiMartino teaches the spring supports (152) depend from a base plate (66, 69; figure 1) which is wide enough to span the space between adjacent modules (31) and which in use is secured to the tops of the building modules (31) (the connector device (10) is connected to the top of the building modules via corner fittings (30) which are connected at top and bottom corners of the modules) to prevent relative movement therebetween in the horizontal plane (the interlocking action of 32-34 within the channel as illustrated in figure 4 prevent movement in the horizontal plane) (see column 3 lines 37-66 for a detailed description of the locking means).

Regarding claim 9, DiMartino teaches linking together adjacent modular building units (31) (linking via connectors 10), and securing over the horizontal junctions between the tops of adjacent modular building units (31) a metal sheet

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(body 11) in which is formed a gutter (as illustrated in figures 2 and 4) for conducting rain water or condensation from the top of each storey of modular building units in the building to the outside of the building (body 11 item is capable of conduction rainwater away from the modules).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over DiMartino (5,454,673) in view of DiMartino (3,972,439).

Regarding claim 5, DiMartino '673 teaches spring supports (152) extend upwardly from the base plate (67) to terminate in outwardly directed flanges (12) for engaging over the tops of a pair of channel members (28) secured to the outside of the modules.

However DiMartino '673 fails to explicitly disclose a next layer of modules is moved into position to form the next storey of the building.

DiMartino '439 teaches a second storey (see figure 6) of modules using a similar connection configuration to DiMartino '673.

Therefore, from the teaching of DiMartino '439, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

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modify the modules of DiMartino '673 to include the stacked modules of DiMartino '439 in order to fit more modules into a given space.

9. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiMartino (5,454,673) in view of Kraus (5,651,634).

Regarding claim 6, DiMartino teaches the link means (connector 10) comprises a pin member (via arm 12 and head portion 32-34) extending transversely across the space between adjacent building modules (31) (as illustrated in figure 1) and supported by an insert bar (flange 25) on which the pin member (via arm 12 and head portion 32-34) can be lowered into the said space; and each channel means (orifice 28) is a channel member on the outside wall of each building module (as illustrated in figure 1).

However, DiMartino fails to explicitly disclose the pin member is double headed and a guide channel is provided to guide the head portion into the channel.

Kraus teaches a connection between plate elements which comprises a double headed pin (as illustrated in figure 1, flanges 14 and 15) and a guide channel provided to guide the pin into a channel (guide channel is illustrated in figure 8, insertion slots 41, 42).

Therefore, from the teaching of Kraus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connecting means of DiMartino to include a double head in order to provide an extra degree of security in the connection means to prevent the head portion

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from coming apart from the channel. Further, it would have been obvious to modify the channel of DiMartino to include the guide as disclosed in Kraus in order to make the connection process easier.

Regarding claim 7, DiMartino teaches the resilient means is a spring member (pushrod 152) which includes an aperture (as illustrated in figure 2, the cross section view shows the pin (arm 12) protruding into the pushrod 152 space and receiving the end of the arm) into which an end of the pin can be received, so that lowering of the link means into the space between the building modules causes deflection of the spring member (152) until the end of the pin (arm 12) is received in the aperture (figures 2, 4), whereupon the spring member springs back to retain the pin member (12) (see column 3 lines 37-66 for a detailed description of the locking means).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Capron et al. (4,942,975) teaches a locking mechanism for modular adjacent units.

DiMartino, Sr. (4,599,829) teaches a modular container building system.

Benedetti et al. (2004/0223805) teaches a plate fastener which engages a channel and has resilient fastening means.

Fisher (4,194,339) and (4,050,215) teaches a method of construction using connected modular blocks.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON HOLLOWAY whose telephone number is (571) 270-5786. The examiner can normally be reached on M-F 8:30-6; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on 571-272-6782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JASON HOLLOWAY
Examiner
Art Unit 4165

JH

/Lynda Jasmin/
Supervisory Patent Examiner, Art Unit 4165